




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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,062	10/22/2003	Rainer Bottesch	SCH-00076	6104
7590 09/23/2004			EXAMINER	
Warn, Burgess & Hoffmann, P.C.			HAN, JASON	
P.O. Box 70098			ART UNIT	
Rochester Hills, MI 48307			PAPER NUMBER	
			2875	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/691,062	BOTTESCH ET AL.	
	Examiner	Art Unit	
	Jason M Han	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☒ Claim(s) 1,3,13,15,17 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing and light disk must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: light-conducting element 1b. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Drawing 4: (1a'). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified

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and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "1a, 1a', 1b, 4" have both been used to designate the light-conducting element. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:
- a. Paragraph 15, Line 3: please rewrite to read "reflector 1 and";
 - b. Paragraph 15, Line 12: please rewrite to read "reflector 1 and";
 - c. Paragraph 16, Line 4: please rewrite to read "reflector 1 and";
 - d. Paragraph 18, Line 3: grammatical error – please use only one coordinating conjunction;
 - e. Paragraph 20: please rewrite to read – "In this embodiment, essentially all of the light emanating from the LED 2 is picked up by the element 1a. It also has

little thickness corresponding substantially to the height of the LED 2. The element 1a is, therefore, eminently suitable if little installation depth is available.”;

f. Please do not use “light-conducting element” in referring to different elements (4, 1a, 1a’, 1b) – it is unclear and indefinite. It is also suggested that such clarification be further provided in the claims.

Appropriate correction is required.

Claim Objections

7. Claim 1 is objected to because of the following informalities: It is unclear what the light disk is - the examiner assumes that this is referring to a lens or enclosure for the lamp. Please elucidate and provide appropriate corrections.

8. Claims 3 and 15 are objected to because of the following informalities: The term reflector is vague and indefinite. The term could constitute a number of interpretations, and the examiner suggests using coaxial annular reflector or parabolic reflector instead (terms that provide further definition).

9. Claim 13 is objected to because of the following informalities: Refrain from using the word “preferably,” and positively state the limitation.

10. Claim 17 is objected to because of the following informalities: Please rewrite to read, “The reflector comprises a passage opening to admit the rays of light to the light-conducting element.” Given Claim 16 the light is received by the light-conducting element and not from. As mentioned above in the objection to the specification, please refrain from interchangeable use of the term, light-conducting element, and remain consistent in language.

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11. Claim 20 is objected to because of the following informalities: Please rewrite to read "the light rays from the reflector" or "the light rays reflected by the reflector."

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 7-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Please define light-conducting element and reflector, and remain consistent in language. It is unclear to the examiner due to the interchangeable use of the terms for different elements. The following rejections have been based upon the examiner's best interpretation [MPEP 2111].

14. Claims 19 and 22 recite the limitation "reflection surfaces". There is insufficient antecedent basis for this limitation in the claim. What does the applicant mean by "between the reflection surfaces"? Where are these "reflection surfaces" located? Appropriate correction is required.

15. Claim 24 recites the limitation "rear portion". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo et al. (U.S. Patent 6447155).

18. With regards to Claim 1, Kondo teaches a lamp unit/housing [Figure 1: (1)] for a vehicle having two light sources [Figure 2: (11, 21)] that are positioned behind a light disk [Figure 2: (3)] and associated with at least one reflection part [Figure 2: (12-14 and 22)], wherein one of the light sources provided is an LED [Figure 2: (11)] that emits light laterally (inherent) and is surrounded by a reflection part [Figure 2: (12-14); see also Figures 3-5].

19. With regards to Claim 2, Kondo teaches that the height of the reflection part corresponds essentially to the height of the LED [Figure 2: (12-14); Column 2, Lines 50-55; see also Figures 3-5].

20. With regards to Claim 3, Kondo discloses a reflection part further having a reflector [Figure 2: (12-14, 22); see also Figures 3-5]. It should also be noted that a reflection part is inherent of and synonymous with a reflector. Merriam-Webster's Collegiate Dictionary (10th Edition, p. 980) defines a reflector as one that reflects; especially: a polished surface for reflecting light or other radiation.

21. With regards to Claim 4, Kondo teaches a reflector with parabolic configuration [Figures 2, 3, 5: (13)].

22. With regards to Claim 5, Kondo discloses an LED arranged at the focus of the reflector [Figure 2: (f1); see also Figures 3&5].

23. With regards to Claim 6, Kondo discloses a reflector with a surface having optics [Figure 2: (14c); Figure 3: (16a); Figure 4: (16e); Figure 5: (13a, 14e)].

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24. With regards to Claim 7, Kondo discloses the reflection part including a light-conducting element [Figure 2: (13, 14); Figure 3: (13, 16); Figure 4: (16); Figure 5: (13, 14)].

25. With regards to Claim 8, Kondo discloses the light-conducting element having a circular outline [Figures 1&6; Figure 2: (12-14); Figure 3: (13, 16); Figure 4: (16); Figure 5: (13, 14)].

26. With regards to Claim 9, Kondo discloses the light-conducting element having a central aperture where the LED is located [Figures 2&3: (11); see also Figure 5].

27. With regards to Claim 10, Kondo discloses the light-conducting element having reflection surfaces to reflect the light emitted by the LED to a light exit surface [Figure 2: (14a, 14c); Figure 3: (16a); Figure 4: (16a, 16e); Figure 5: (14e)].

28. With regards to Claim 11, Kondo discloses the reflection surfaces coaxial to the LED [Figure 2: (14a, 14c); Figure 3: (16a); Figure 4: (16a, 16e); Figure 5: (14e)].

29. With regards to Claim 12, Kondo discloses reflection surfaces provided on the underside of the light-conducting element [Figure 3: (16a); Figure 4: (16a, 16e)].

30. With regards to Claim 13, Kondo teaches the outside of the light-conducting element provided with at least one reflection layer. To quote, "the reflection portion 14a integrally formed is formed by selective vacuum evaporation of aluminum [Column 3, Lines 25-26]."

31. With regards to Claim 14, Kondo discloses at least two reflection parts arranged closely spaced one behind the other in the beam direction of the LED [Figure 2: (13, 14); Figure 3: (13, 16); Figure 5: (13, 14)].

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32. With regards to Claim 15, Kondo discloses one reflection part having a reflector [Figure 3: (13); Figure 5: (13)] and the other having a light-conducting element [Figure 3: (16); Figure 5: (14)].

33. With regards to Claim 16, Kondo teaches the reflector [Figures 2, 3, 5: (13)] ahead of the light-conducting element [Figure 2: (14); Figure 3: (16); Figure 5: (14)] in the beam direction.

34. With regards to Claim 17, Kondo teaches the reflector having a passage opening to admit rays of the light to the light-conducting element [Figures 2-5].

35. With regards to Claim 18, Kondo teaches the reflector [Figure 2: (14); Figure 3: (16); Figure 5: (14)] behind the light-conducting element [Figures 2, 3, 5: (13)] in the beam direction.

36. With regards to Claim 19, Kondo teaches the light rays reflected by the reflector entering the light-conducting element between the reflection surfaces [Figure 3: (16d); Figure 4: (16d); Figure 5: (14d)].

37. With regards to Claim 20, Kondo discloses the light rays reflected by the reflector and impinging perpendicularly on the underside of the light-conducting element [Figure 3: (16a); Figure 4: (16a)].

38. With regards to Claim 21, Kondo teaches two light-conducting elements arranged one [Figure 2: (20)] behind the other [Figure 2: (10)] in beam direction.

39. With regards to Claim 22, Kondo teaches rays of light that are reflected from the rearward light-conducting element [Figure 2: (22)] and entering the anterior light-conducting element in the region between the reflection surfaces [Figure 2: 14b)].

40. With regards to Claim 23, Kondo teaches the light rays of the rearward light-conducting element impinging perpendicularly [Column 3, Lines 37-54] on the underside of the anterior light-conducting element [Figure 2: (14b)].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

41. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (U.S. Patent 6447155) in view of Schöniger et al. (U.S. Patent 5136483).

Kondo teaches a reflection part as cited above.

Kondo does not teach the reflection part having a cooling member located on the underside thereof.

Schöniger discloses a reflector [Figure 3: (16)] with cooling members located on the underside thereof [Figure 3: (19)].

It would have been obvious to modify the reflection part of Kondo to incorporate the cooling members of Schöniger to ensure proper heat dissipation for the LED and thereby illumination efficiency.

42. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (U.S. Patent 6447155).

With regards to Claim 26, Kondo discloses two reflection parts corresponding to two different lamps as described above [Figure 2: (10, 20)]. Kondo further teaches a vehicle lamp [Figure 7] with double filaments emitting the same light color.

Kondo does not teach both lamps having an LED.

It would have been obvious to further modify the lamp of Kondo by replacing the incandescent lamp [Figure 2: (20)] with another LED lamp [Figure 2: (10)] with minor adjustments in the reflection surfaces. By doing so will permit a more compact lamp, which would save space and provide for easier installation.

43. With regards to Claim 27, Kondo teaches a combination of lamp units different in color [Column 5, Lines 45-53].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references have been further cited to show the state of the art relevant to the current application:

U.S. Publication 2004/0027833 to Amano et al.;

U.S. Patent 6755556 to Gasquet et al.;

U.S. Patent 5707130 to Zwick et al.;

U.S. Patent 6485170 to Natsume;

U.S. Patent 4729076 to Masami et al.;

U.S. Publication 2003/0189828 to Coushaine;

U.S. Patent 6366409 to Umemoto et al.;

U.S. Patent 6356394 to Glienicke;

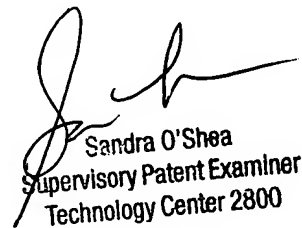
U.S. Patent 6558032 to Kondo et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH



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